

WHAT IS CLAIMED IS:

1. An apparatus for locating a mobile device, comprising an application programming interface (API), executed by a computer, for providing a plurality of simplified procedures that allow an application program executed by the computer to locate the mobile device, wherein:
 - (a) the application program invokes the simplified procedures of the API; and
 - (b) the invoked procedures obtain:
 - (i) a location of the mobile device given an identification of the mobile device, wherein:
 - (1) the invoked procedures interact with specifics for a mobile positioning server of a carrier of the mobile device; and
 - (2) the invoked procedures interact with different methods of identifying the device as required by the carrier;
 - (ii) a description of a spatial reference system associated with the location.
2. The apparatus of claim 1 wherein the identification of the mobile device comprises a cellular phone number.
3. The apparatus of claim 1 wherein the identification of the mobile device comprises a mobile subscriber international subscriber dialing number (MSISDN).

20

4. The apparatus of claim 1 wherein the identification of the mobile device comprises an Internet protocol (IP) address encoded in a request header.

5. The apparatus of claim 1 wherein the identification of the mobile device 5 comprises a pre-stored default.

6. The apparatus of claim 1 wherein the invoked procedures interact with different protocols.

10 7. The apparatus of claim 1 wherein the application program refines the location of the mobile device by applying a heuristic.

8. The apparatus of claim 7 wherein the location is refined by snapping to a closest point on a street network.

15 9. The apparatus of claim 7 wherein the location is refined by snapping to a landmark or a point of interest in the vicinity.

10. The apparatus of claim 7 wherein the location is refined by snapping to a 20 location in a vicinity of the location that a mobile device user has recently visited.

11. The apparatus of claim 7 wherein the location is refined by snapping to a location in a vicinity of the location that a mobile device user has bookmarked as a

“favorite” location.

12. The apparatus of claim 1 wherein the application program may be dynamically deployed within a system without deploying a new version of the system.

5

13. A method for accessing a network provided location of a mobile device, comprising invoking one or more simplified procedures of an application programming interface (API) executed by a computer, wherein:

- (a) the simplified procedures allow an application program executed by the computer to access the network provided location of the mobile device; and
- (b) the simplified procedures of the API obtain:
 - (i) a location of the mobile device given an identification of the mobile device, wherein:
 - (1) the invoked procedures interact with specifics for a mobile positioning server of a carrier of the mobile device; and
 - (2) the invoked procedures interact with different methods of identifying the device as required by the carrier;
 - (ii) a description of a spatial reference system associated with the location.

20

14. The method of claim 13 wherein the identification of the mobile device comprises a cellular phone number.

15. The method of claim 13 wherein the identification of the mobile device comprises a mobile subscriber international subscriber dialing number (MSISDN).

16. The method of claim 13 wherein the identification of the mobile device
5 comprises an Internet protocol (IP) address encoded in a request header.

17. The method of claim 13 wherein the identification of the mobile device comprises a pre-stored default.

10 18. The method of claim 13 wherein the invoked procedures interact with different protocols.

19. The method of claim 13 further comprising refining the location of the mobile device by applying a heuristic.

15

20. The method of claim 19 wherein the location is refined by snapping to a closest point on a street network.

21. The method of claim 19 wherein the location is refined by snapping to a
20 landmark or a point of interest in the vicinity.

22. The method of claim 19 wherein the location is refined by snapping to a location in a vicinity of the location that a mobile device user has recently visited.

23. The method of claim 19 wherein the location is refined by snapping to a location in a vicinity of the location that a mobile device user has bookmarked as a “favorite” location.

5

24. The method of claim 13 further comprising dynamically deployed the application program within a system of the computer without deploying a new version of the system.

10 25. An article of manufacture embodying an application programming interface (API) that is executed by a computer, wherein the API includes a plurality of simplified procedures that allow an application program executed by the client computer to access a network provided location of a mobile device, wherein:

15 (a) the application program invokes the simplified procedures of the API;

and

(b) the invoked procedures obtain:

(i) a location of the mobile device given an identification of the mobile device, wherein:

20 (1) the invoked procedures interact with specifics for a mobile positioning server of a carrier of the mobile device; and

(2) the invoked procedures interact with different methods of identifying the device as required by the carrier;

(ii) a description of a spatial reference system associated with the

location.

26. The article of manufacture of claim 25 wherein the identification of the mobile device comprises a cellular phone number.

5

27. The article of manufacture of claim 25 wherein the identification of the mobile device comprises a mobile subscriber international subscriber dialing number (MSISDN).

10

28. The article of manufacture of claim 25 wherein the identification of the mobile device comprises an Internet protocol (IP) address encoded in a request header.

15

29. The article of manufacture of claim 25 wherein the identification of the mobile device comprises a pre-stored default.

15

30. The article of manufacture of claim 25 wherein the invoked procedures interact with different protocols.

20

31. The article of manufacture of claim 25 wherein the application program refines the location of the mobile device by applying a heuristic.

32. The article of manufacture of claim 31 wherein the location is refined by snapping to a closest point on a street network.

33. The article of manufacture of claim 31 wherein the location is refined by snapping to a landmark or a point of interest in the vicinity.

5 34. The article of manufacture of claim 31 wherein the location is refined by snapping to a location in a vicinity of the location that a mobile device user has recently . visited.

35. The article of manufacture of claim 31 wherein the location is refined by
10 snapping to a location in a vicinity of the location that a mobile device user has
bookmarked as a “favorite” location.

36. The article of manufacture of claim 25 wherein the application program
may be dynamically deployed within a system without deploying a new version of the
system.